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EXAMINER

GOSSAGE, GLENN A

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| ART UNIT | PAPER NUMBER |
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2187

DATE MAILED: 08/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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EXAMINER

ART UNIT

PAPER NUMBER

5

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-17 are pending in the application.

Of the above, claims _____ are withdrawn from consideration.

2. ☐ Claims _____ have been cancelled.

3. ☐ Claims _____ are allowed.

4. ☒ Claims 1-17 are rejected.

5. ☐ Claims _____ are objected to.

6. ☐ Claims _____ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

PTOL-326 (Rev. 2/93)

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1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. A new title such as --NETWORK DATA NODE INCLUDING A CACHE MEMORY MANAGER FOR SELECTIVELY USING DIFFERENT CACHE MANAGEMENT METHODS-- is suggested (note claim 1, lines 1-2 and 5-12, e.g.). The loss in brevity of title is more than offset by the gain in its informative value in indexing, classifying, searching, etc. See MPEP 606 and 606.01.

2. The abstract of the disclosure is objected to because in lines 10-11, the wording "embodiment may embed" is confusing as it is not clear how an embodiment itself embeds anything. The wording "cache management it the storage" in line 11 is also not clear. It appears in "A preferred embodiment may embed the" in lines 10-11 should be changed to simply --The--, and "it the" in line 11 changed to --may be embedded in-- for clarity.

Also, the proper antecedent basis for "the system" in line 5 is not clear (note the "system" in lines 1 and 3, e.g.). Initially, it appears "that" in line 1 should be changed to --manages a number of cache management systems and-- for clarity and consistency (see Figure 1a, for example). Also, --network accelerator storage caching-- should be inserted before "system" in line 5 for clarity. In line 11, "executing; in" is not clear. Also in line 11, and throughout the abstract, the first occurrence of all acronyms or abbreviations should be written out for clarity, whether or not they may be considered "well known." Accordingly, in line 13, " ; in a CPU" should be changed to --in a central processing unit (CPU)-- for clarity. In line 14, it appears "be

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scalable and” should be deleted (note lines 2-3), and “data.” in line 15 changed to -- data, and is dynamically configurable-- for clarity and completeness. Additionally, it appears “configurations” in line 4 should be changed to --configuration(s)-- (see the abstract in the original parent application , e.g.), and --a-- should be inserted before “least” in line 8, for clarity. In lines 13-14, it appears “In a preferred embodiment the system is” should be changed to --The network accelerator storage caching system may be-- for clarity, analogous to line 5.

Appropriate correction is required. See MPEP § 608.01(b) as well as 37 CFR 1.72(b).

3. The drawings are objected to for the reasons set forth in the original parent application Serial No. 08/659, 482 (see the Office action therein, mailed January 20, 1998). That is, the drawings filed with this application appear to be similar to the drawings filed in parent application Serial No. 08/659,482. However, the drawings should also incorporate the drawing corrections filed in the parent application on April 20, 1998; January 21, 1999; September 22, 1999; and May 5, 2000 for clarity and consistency.

By way of example only, in Figure 1a, at least one of each of the different elements or “boxes” should be descriptively labeled for clarity. For example, labels such as --SERVICE PROVIDER--, --CONTENT PROVIDER--, --BACKBONE LINK--, --LOCAL SITE--, and --USER STATION-- should be added within “boxes” 00, 02, 04, 06 and 08 (both occurrences), for clarity. See page 11, line 13; page 12, line 2; and page 11, lines 14, 16 and 22, respectively. It

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also appears a label such as --CACHE MGMT. SYSTEM-- should be added near the reference numeral 10 in the middle of the figure (near content provider 02, e.g.) for clarity. At least one of the “boxes” 12 should also be descriptively labeled --CONTROL DEVICE-- for clarity (see page 11, line 8, e.g.).

In Figure 1b, at least one of the “boxes” 12 should be descriptively labeled similar to Figure 1a for clarity and consistency.

In Figure 2A, the labels within each of the steps does not appear to be entirely consistent with the language used in the specification. For example, the label within “circle” or step 22 is confusing and does not appear to be consistent with the specification. It appears “A” should be changed to --Initial entry made to configurator-- or other similar language for clarity (note page 16, lines 7-8, e.g.). Within “box” or step 24, it appears “Config.” should be changed to --Configurator configures-- for clarity and consistency. Also, it appears (Fig. 2b)-- should be inserted after “subset” for clarity. See page 17, lines 19-22, e.g. Within steps 28 and 36, it appears --configured cache-- should be inserted before “method” for clarity and consistency (see page 20, lines 12-13 and 20-21, e.g.). Within step 30, “Already” should be changed to --Data already-- for clarity and consistency (see page 20, lines 2-3, e.g.). Within step 34, --data-- should be inserted after “Requested” for clarity and consistency. Additionally, the “No” arrow from step 26 should be shown coming from the right “point” of the diamond for step 26. The label “No” should also be moved closer to this point. Similarly, the labels “Yes” and “No” for step 30 should be moved closer to their respective “points” of the diamond for step 30 for clarity.

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In Figure 2b, the labels within each of the steps does not appear to be entirely consistent with the language used in the specification analogous to Figure 2a. It appears within step 24a, "Forms" should be changed to --Store through cache method for forms?-- for clarity and consistency (see page 18, lines 2-3, e.g.). In steps 24^xb, 24^xd, 24f, 24h, 24j, 24l, 24n and 24 p, "process" should be changed to --Processing for-- for clarity and consistency (see page 18, lines 4-58 and 6-7, by way of example only). In step 24c, "security" should be changed to --Security to be provided?-- for clarity and consistency (see page 18, lines 5-6, e.g.). In steps 24e, 24g, 24i, 24k, 24m and 24o, "?" (the question mark) should be changed to --caching?-- [For example, "Index?" should be changed to --Index caching?-- and "LRU" should be changed to --LRU caching?--.]

Also, within step 24q, "26" should be changed to --To step 26 (Fig. 2a)-- for clarity and consistency (see page 19, lines 11-13, e.g.). In step 24m, the label "No" should be moved to the left "point" of the diamond for step 24m. It also appears an "output" or line and arrow should be added from the step 24n to the "No" output of step 24m. It also appears the "lines" within "box" 24 should be deleted.

In Figure 3, --data-- should be inserted after "LRU" in steps or "boxes" 37b and 38 for clarity and consistency (note page 21, lines 11-12, e.g.). The reference numeral 32 within the circle below step 38 should be changed to --To step 32 (Fig. 2a)-- for clarity. The other circle 32 should be deleted and the "output" of step 38 shown being input to the "circle" or step 32 below step 38. Additionally, it appears the arrow "above" step 37a should be reversed. Also, it appears

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steps 37a and 37b should be relabeled --36a-- and 36b-- for clarity and consistency (with Figure 2a, e.g.). The steps 36, 36a and 36b may also be enclosed within a “dashed” or “dotted” box for clarity and consistency with Fig. 2a. It also appears the “lines” within “box” 36 should be deleted.

In Figures 4-9, 10a and 10b, the reference numerals within the different “circles” should be clarified analogous to Figures 2b and 3. [By way of example only, in Figure 4, within “circles” 28 and 34, respectively, “28 (34)” should be changed to --To step 28 (Fig. 2a)-- and --To step 34 (Fig. 2a)-- for clarity and consistency. Figures 5-9, 10a and 10b should be similarly amended.]

Also in Figure 4, it appears steps 27a and 27b should be relabeled 30a and 30b, respectively, for clarity and consistency (note Figure 5, e.g.). A “dashed” or “dotted” box may also be drawn around elements 30, 30a and 30b for clarity. The labels “yes” and “no” near diamond 27b (30b) should be moved closer to their respective lines or outputs. Also, it appears the lines within “box” 30 should be deleted.

Also in Figure 5, within “box” 36a, it appears --(type)-- should be inserted after “usage” for clarity. Also, it appears the lines within “boxes” 28 and 36 should be deleted.

Also in Figures 6 and 7, it appears steps 27a and 27b should be relabeled 26a and 26b, respectively, for clarity and consistency. Also, it appears the lines within “box” 26 should be deleted.

Also in Figures 8 and 9, it appears step 37 should be relabeled 36a for clarity and consistency. Also, it appears the lines within “box” 36 should be deleted.

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Also in Figure 10a, it appears --Yes-- should be inserted after “Requested?” within “box” 26 for clarity. Also in Figure 10a, as well as 10b, it appears the lines within “box” 26 should be deleted.

Also in Figure 10b, the reference numerals for the different steps is confusing and does not appear to be consistent with those used in the specification. It appears steps 26a and 26e should be relabeled 26e and 26e-1, respectively, for clarity and consistency (note page 30, lines 19-20, e.g.). In “box” 26f, it appears “page” should be changed to --page(s)-- for clarity and consistency (see page 30, line 23 to page 31, line 1, e.g.).

Applicant is REQUIRED to submit a proposed drawing correction in reply to this Office action. However, actual formal correction of the noted defect can be deferred until the application is allowed by the examiner. Also note MPEP 608.02(r) and (v).

Appropriate correction is required.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “data node(s),” “cache memory device” and “cache memory manager” of claim 1 [in this regard, also note the comments in numbered paragraph 6 below with respect to claim 1]; the “means for receiving commands” (set forth in addition to the “cache memory device” and “cache memory manager”) of claims 2 and 14; the

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“method storage means” and “method selection means” of claims 3 and 16; and the “monitoring means” of claims 4 and 17, must be shown or the features canceled from the claims. No new matter should be entered.

5. It is noted here that the disclosure has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the disclosure. The following objections are specifically noted:

In the specification:

On page 1, and throughout the specification, updated information (updated status, e.g.) should be provided for the parent applications cited in lines 2-7. [For example, it appears --, now abandoned,-- should be inserted after “2000” in line 3.] Moreover, the claim for priority does not appear to be entirely proper as the information for the original application does not appear to be accurate. It appears “09/659,482 filed April 20, 1998” in line 5 should be changed to --08/659,482, filed June 6, 1996--. Also, it appears “invention” in line 7 should be changed to --application-- for clarity and consistency (note line 6, e.g.).

On page 2, line 5, it appears “,” should be deleted and “California” changed to --California)-
- for clarity. Also, it appears “such as ... California)” should be set off by commas for clarity.

On page 5, line 21, it appears --(AOL)-- should be inserted after “Online” for clarity.

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On page 9, lines 15-16, the wording "drawing of illustrative embodiments of the present invention" is vague and indefinite as not being sufficiently descriptive (this description could be used in almost every patent application). Similarly, in line 17, the language "flow diagram of the present invention" is vague and indefinite as not being sufficiently descriptive.

On page 11, line 2, it appears "HTML" should be changed to --hyper-text markup language (HTML)-- for clarity.

On page 12, line 4, it appears "1ob" should be --10b--. In line 5, it appears --(or inexpensive)-- should be inserted after "independent" for consistency with the acronym as commonly used in the art. In line 18, it appears "invention; -" should be --invention,--. In line 23, it appears "CPU" should be inserted before "contained" for clarity and consistency (note the specification in the parent application, e.g.).

On page 14, line 4, it appears "(TP/IP)" should be --(TCP/IP)-- for clarity and consistency.

On page 16, line 3, it appears "1" should be --1a--.

On page 18, line 1, it appears an explanatory sentence or passage such as --Where a processing block is shown in Figure 2b, those skilled in the art will recognize that different types of setup and initialization are being performed in each process block. Switches may be set, addresses or indexes initialized and so on.-- should be inserted after "message." for clarity and consistency with the disclosure in the parent application (see the original specification in the parent application at page 19, lines 15-17 and amendments made thereto, for example).

Similarly, on page 18, line 18, it appears an explanatory sentence such as --Proceeding with

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Figure 2b, at decision block 24i, the configurator checks to see if a usage based method of cache management is selected.-- should be inserted after “24h” for clarity and consistency (again see the original specification in the parent application at page 19, lines 13-14 and amendments made thereto). A description of step 24j should also be added at this point of the specification (after the description of step 24i) for clarity and completeness.

On page 19, line 3, it appears “system” should be --configurator-- for consistency.

On page 21, line 3, it appears “unit” should be --unit(s)--.

On page 25, line 1, it appears “27b” should be --26b--.

On page 29, line 13, it appears “1a” should be --10a--. In lines 17-18, it appears “the configurator checks a d request” should be changed to --a data request is checked-- for consistency with the specification in the parent application. In line 22, “the check is made to ; if the data contains” is not clear. It appears “;” should be --see--. In line 23, it appears “invention goes” should be --method proceeds-- for clarity.

On page 30, line 1, “to request” should be --and a request is made-- for clarity. In line 2, it appears “configurator” should be --method--. In line 17, it appears “the configurator next checks at step 26e” should be changed to --a check is made--. In line 18, it appears “First, a” should be simply --A--. In line 21, it appears “do” should be --are-- for consistency (note line 20, e.g.).

On page 31, line 3, it appears “the system” should be changed to --operation of the method-- for clarity. Also, the description in lines 3-8 appears to be somewhat incomplete as a description

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of step 26b appears to be missing (in this regard, see the amendment made in the response filed May 5, 200 in parent application Serial No. 08/659,482).

On page 32, lines 10-11, and throughout the entire specification, all trademarks and trade names, and their respective owners, should be properly identified. See MPEP 608.01(v). A principal place of business or city where the company's headquarters is located, should also be provided for clarity and completeness. In line 15, it appears "ASICS" should be --ASICs--.

Upon reviewing the number and nature of the changes necessary to place the specification in proper form, the Examiner believes that a substitute specification should be required to avoid possible printing or issue review errors, should any patent issue based on this application.

Accordingly, a substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is REQUIRED. The substitute specification filed must be accompanied by a statement that it contains no new matter. Such statement must be a verified statement if made by a person not registered to practice before the Office. See 37 CFR 1.125.

In the claims:

In claim 1, line 3, "connected" appears to read more clearly here as --coupled--. In line 12, it appears "is" should be --are-- ("methods ... are").

In claim 4, line 3, it appears "commands" should be changed to --commands-- (note claim 16, line 3, e.g.).

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In claim 5, line 2, it appears --memory-- should be inserted after “cache” (both occurrences) for consistency (note claim 1, line 10, e.g.). See also claims 6-11.

In claim 12, lines 1-2, it appears “of said data nodes” reads more clearly here as simply --data node-- for clarity (note claim 1, line 1, e.g.).

Appropriate correction is required.

The application is also objected to because of alterations which have not been initialed and/or dated as is required by 37 CFR 1.52(c). See, for example, page 7. A properly executed oath or declaration which complies with 37 CFR 1.67(a) and identifies the application by application number and filing date is required.

6. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, and therefore its dependent claims, it is not entirely clear to what the “data node” refers here (support for such language in the specification?). It is also not adequately clear to what the “cache memory device” and “cache memory manager, which are within the “data node,” refer here, or how these elements are connected or related to the elements described in the specification and shown in the drawings. [Should “data node” be changed to --cache

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management system--? See page 13, lines 6-12 and page 13, lines 3-4, e.g. Should “cache memory device” and “cache memory manager” be changed to --storage unit-- and --control device--, respectively? See page 11, lines 7-8, e.g. Note that the storage units (cache memory device?) is shown as part of the “cache memory management system” along with the “control device.”] Also, the language “A data node ... in a data network comprising” is somewhat unclear. [Does “comprising” refer back to the “data node” or the network?] It appears language such as --, each data node-- (or --each cache management system--) should be inserted before “comprising” for clarity. It is also not entirely clear how the cache memory manager controls transfers “in response to” a method.

In claim 2, as well as claim 14, it is not readily apparent to what the “method storage means” and “method selection means” refer in this instance, or how they are connected or related to the other elements set forth in the claims such as the “cache memory device” and “cache memory manager.”

Similarly, in claims 3 and 4, as well as claims 16 and 17, it is not entirely clear to what the “monitoring means” and “means for receiving” refer here, how they are connected or related to the other elements or “means” set forth in the claim. By way of example, it is not clear how the “monitoring means” and “means for receiving” are connected or related to the “cache memory manager” or the “method storage means.” It is also not entirely clear how “methods” are stored (support for language in the specification?).

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Applicants are respectfully reminded that while 35 U.S.C. 112 sixth paragraph permits the use of "means plus function" language in a claim, this provision must always be considered as subordinate to the second paragraph of 35 U.S.C. 112 (see *In re Lundberg*, 244 F.2d at 547-548, 113 USPQ at 534 (CCPA 1979)). If one employs means plus function language in a claim, one must set forth an adequate disclosure showing what is meant by that language. If applicant fails to set forth such an adequate disclosure, applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112. See *In re Donaldson Company, Inc.*, 29 USPQ 2nd 1845 (Fed. Cir. 1994).

In the instant case, the language of the specification and claims is such that applicant has failed to provide an adequate disclosure showing to what the various "means" such as the "method storage means," "method selection means," "monitoring means" and "means for receiving" refer in this instance. The terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description (in this regard, see also 37 CFR 1.75(d)(1)).

Claim 5 is unclear since it depends from itself. Accordingly, claims 6-11, which depend from claim 5, are also unclear.

In claim 13, it is not clear how the cache memory manager "operates in response to" a cache memory management method, as the "methods" are set forth as part of the cache memory manager, not operating "in response to" the methods (see claim 2, lines 1-3, e.g.). The proper antecedent for "the other network site" is also not entirely clear (note claim 1, lines 1 and 7, e.g.).

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In claim 15, it is not entirely clear how “methods” are stored analogous to claims 2 and 14.

7. Claims 12 and 13 are rejected under 35 U.S.C. 112, fourth paragraph, as failing to further limit the subject matter of a previous claim.

The limitations of claims 12 and 13 would appear to be encompassed within the language of claim 1, lines 9-12. [Note that Claim 14 would thus be substantially the same as claim 2. In this regard, also see 37 CFR 1.75(b).]

Applicant is required to cancel the claim(s), amend the claim(s) to place the claim(s) in proper form by further limiting the subject matter of a previous claim, or explain why the claim(s) as presently worded further limits the subject matter of a previous claim.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

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Claims 1-4 and 12-14, insofar as definite and clear, are rejected under 35 U.S.C. 102(b) as being anticipated by Willick et al or Korner, each taken separately.

With respect to claim 1, as well as claims 12 and 13, Willick et al or Korner, each taken separately, discloses a data network including data “nodes” at each of first and second sites in the data network, each data “node” including a cache memory device connected to the data network, and a cache memory “manager” or controller connected to a respective cache memory device for controlling communications between the cache memory device and other sites in the data network, as in the present invention. Each of the cache memory managers or controllers controls transfers “in response to” one of at least two cache memory management methods, such as LRU or frequency/usage based replacement (FBR). The cache memory management method used or selected at a first site (a client workstation, e.g.) may be different than the cache management method used or selected at a second site (a server, e.g.). See pages 2-4 and 7-9 of Willick et al, and pages 220-221, 223 and 225-226 of Korner, e.g. With respect to claims 12 and 13, the references teach that each of the data nodes may operate with a different predetermined cache memory management method. A cache memory manager at one site may operate “in response to” a predetermined cache memory management method that is different from the cache memory management method used at another network site.

By way of example only, an LRU cache management algorithm or method, which may be selected from a plurality of cache management algorithms or methods, may be “selected” to optimize cache access efficiency at a particular network site and thus increase the operating

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speed. A user may thus configure and select the type of cache management algorithm to be used, which allows a user at a site in a network to address a particular need in an optimum way while, at the same time, allowing other network sites, such as a file server or content provider, to employ their own respective methods or solutions to similarly address their own needs. This allows a user to optimize his or her site's data usage need in an optimum manner without impacting other network sites.

[Note also that it would appear users on their home personal computers (PCS) connected to the Internet who optimize caching at their site or computer (by disabling caching or setting a cache size to zero, e.g.) or adjusting the cache size in a browser such as Netscape or Internet Explorer, would appear to infringe on the claims as broadly written. That is, a user on the Internet effectively has many choices on how to configure or select cache management techniques, and he may select one of many different caching methods. This choice may be made, of course, independent of other users or computers on the Internet, and thus each of the different users or sites on the Internet may be configured by "selecting" from one of many (at least two) cache management methods to optimize caching at its respective site.]

With respect to claims 2-3, as well as claims 14-15, by storing different parameters to be used in making different cache management or replacement decisions, the references may be considered to "store" different cache management algorithms or "methods." In this manner, different cache management algorithms or methods from all available cache management algorithms may be selected for different sites, i.e. a combination of different cache algorithms

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may be used to achieve optimum cache access efficiency and thus a higher operating speed. The systems may also monitor the performance of the cache management method currently being used or selected and adjustments may be made so as to further optimize cache management, i.e. different cache parameters, and thus a different cache management method, may be selected in order to optimize operation of the cache.

With respect to claim 4, each of the “nodes” includes some “means” for receiving commands from other nodes in the network, such as for reading or writing data at a particular node or site. The cache management method at a particular site may be selected depending on the commands received from the other nodes. That is, depending on the commands received, a different cache management method may be selected and thus the method “selection means” is responsive to the received commands.

9. Claims 15-17, insofar as definite and understood, would appear to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Applicant’s arguments originally filed in the parent applications have again been considered but are not persuasive. It is believed applicant’s arguments have been addressed in the preceding paragraphs.

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It is also noted here that due to the 35 U.S.C. 112, second paragraph, issues outlined above with respect to claims 5-11, no prior art is being applied against the claims, and the subject matter therein not indicated as allowable, since the Examiner cannot ascertain the intended meaning and scope of the claims. In this regard, see In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962). In this regard, also see MPEP 2143.03 and 2173.06. However, insofar as these claims are definite and clear due to the improper claim dependency, these claims would also appear to be unpatentable over the prior art (note that the references explicitly discuss LRU and data usage cache management algorithms, e.g.). As those of ordinary skill in the art would readily appreciate, different cache management algorithms may be utilized with a wide variety of different storage units such as disk drives or random access memories to equivalently provide faster data access. The selection of one particular cache replacement algorithm such as least recently used, data usage, time stamp, etc., based on a particular user's or system's needs does not render the claimed invention patentably distinct.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

O'Toole et al is cited as disclosing adaptive methods for cache management in a network including the use of a hybrid cache with a combination of cache policies.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn Gossage whose telephone number is (703) 305-3820.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Do Yoo, can be reached on (703) 308-4908.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238

(After Final Communications)

(703) 746-7239

(Official Communications)

(703) 746-5713

(Use this FAX number only after approval by the Examiner, for "INFORMAL" or "DRAFT" communications. An Examiner may request that a formal paper/amendment be faxed directly to him or her on occasion.)

A handwritten signature in black ink, appearing to be 'J. Gossage', is located at the bottom right of the page.